

DERWENT-ACC-NO: 2002-283782  
DERWENT-WEEK: 200276  
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TITLE: Ceramic substrate for semiconductor or production  
inspection apparatus  
consists of conductor layer on inside or surface of nitride  
ceramic substrate  
containing specified compositions of oxygen and silica

INVENTOR: NIWA, T

PATENT-ASSIGNEE: IBIDEN CO LTD[IBIG], NIWA T[NIWAI]

PRIORITY-DATA: 2000JP-0017857 (January 21, 2000)

PATENT-FAMILY:

| PUB-NO         | PUB-DATE          | LANGUAGE |
|----------------|-------------------|----------|
| PAGES          | MAIN-IPC          |          |
| US 6475606 B2  | November 5, 2002  | N/A      |
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| JP 2001206772  | July 31, 2001     | N/A      |
| 012            | C04B 035/581      |          |
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| 012            | H05B 003/10       |          |
| JP 3228924 B2  | November 22, 2001 | N/A      |
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| US 20010044015 |                   |          |
| A1             |                   |          |

APPLICATION-DATA:

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| APPL-DATE        |                 |                |
| US 6475606B2     | N/A             | 2001US-0765361 |
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| JP2001206772A    | N/A             | 2000JP-0017857 |
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| JP 3228924B2     | N/A             | 2000JP-0017857 |
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| JP 3228924B2     | Previous Publ.  | JP2001206772   |
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INT-CL (IPC): B32B003/00; B32B018/00 ; C04B035/58 ;  
C04B035/581 ;  
H01L021/324 ; H01L021/66 ; H05B003/02 ; H05B003/10 ;  
H05K001/03

ABSTRACTED-PUB-NO: JP2001206772A

BASIC-ABSTRACT: NOVELTY - The ceramic substrate for semiconductor production-inspection apparatuses, has a conductor layer on the inside or surface of a ceramic substrate of thickness 1-25  $\mu$ m and diameter 200 mm or more. The ceramic substrate consists of a nitride ceramic with 0.1-5 weight% of oxygen and 0.1-50 ppm of silica (Si).

USE - Semiconductor production apparatuses like ceramic heater, electrostatic chuck, wafer prober, etching apparatus, chemical vapor phase epitaxy apparatus etc.

ADVANTAGE - Reduction of volume resistivity is suppressed without reducing the temperature rise-temperature fall characteristics. Reduction of heat conductivity and reduction of Young's modulus at high temperature are prevented.

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EQUIVALENT-ABSTRACTS: NOVELTY - The ceramic substrate for semiconductor production-inspection apparatuses, has a conductor layer on the inside or surface of a ceramic substrate of thickness 1-25  $\mu$ m and diameter 200 mm or more. The ceramic substrate consists of a nitride ceramic with 0.1-5 weight% of oxygen and 0.1-50 ppm of silica (Si).

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CHOSEN-DRAWING: Dwg.0/9

TITLE-TERMS:

CERAMIC SUBSTRATE SEMICONDUCTOR PRODUCE INSPECT APPARATUS  
CONSIST CONDUCTOR  
LAYER SURFACE NITRIDE CERAMIC SUBSTRATE CONTAIN SPECIFIED  
COMPOSITION OXYGEN  
SILICA

DERWENT-CLASS: L02 L03 P73 U11 V06

CPI-CODES: L02-F03; L04-D;

EPI-CODES: U11-A05B; V06-M06F; V06-U11;

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